

CLAIMS

What is claimed as being new and desired to be protected by LETTERS PATENT of the United States is as follows:

1. A mixing and application system for applying a luminescent coating to a nylon webbing comprising, in combination:

a container in a cylindrical configuration with an open top and a closed bottom and with a quantity of coating liquid including one kilogram of a luminescent pigment and one U.S. gallon of a paint base;

a circular lid removably positionable on the open top of the container, the lid having rod extending downwardly from the center of the lid with an impeller at the lower end of the rod in proximity to the bottom of the container, the lid also having a motor with a line to a source of power and a switch for activating the motor to rotate the rod and the impeller to keep the pigment in suspension in the paint base, the lid also having a linear inlet slot and a linear outlet slot, the inlet and outlet slots being parallel with each other on opposite sides of the rod;

a feeding assembly including a supply roll located above the lid and to the side of the container adjacent to the inlet slot, the feeding assembly also including a take up roll located below the lid and to the side of the container adjacent to the outlet

slot, the feeding assembly also including a plurality of idler rolls parallel with each other and the supply and take up rolls, one of the idler rolls being located beneath the supply roll laterally off set from the container with the other idler rolls being located within the container laterally spaced from each other above the impellers, the take up roll adapted to be coupled to a source of power to move a plurality of nylon straps from the supply roll, across the take up rolls and through the container and liquid therein and to the take up roll; and

a drying assembly for nylon straps moving between the outlet slot and the take up roll, the drying assembly including infra red lamps above the webbings and infra red lamps beneath the webbings for drying the pigment and paint base onto the webbings prior to being received on the take up roll, the drying assembly also including a V-shaped bend with a rubber surface on the side of the outlet slot proximate the take up roll and a V-shaped point on the side of the outlet slot remote from the take up roll, the V-shaped bend and the V-shaped point constituting a squeegee to remove excess liquid from the webbings prior to movement of the webbings between the lamps.

2. A mixing and application system comprising:

a container with a quantity of coating liquid including a luminescent pigment and a paint base;

an impeller in proximity to the bottom of the container to keep the pigment in suspension in the paint base, the container also having a linear inlet slot and a linear outlet slot;

a feeding assembly including a supply roll and a take up roll and a plurality of idler rolls to move a plurality of nylon straps from the supply roll, across the take up rolls and through the container and liquid therein and to the take up roll; and

a drying assembly for nylon straps moving between the outlet slot and the take up roll.

3. The system as set forth in claim 2 wherein the quantity of coating liquid includes one kilogram of a luminescent pigment and one U.S. gallon of a paint base.

4. The system as set forth in claim 2 wherein the container includes a removable lid with the slots being formed in the lid.

5. The system as set forth in claim 4 wherein the container includes a rod with a lower end supporting the impellers and an upper end supported by the lid.

6. The system as set forth in claim 2 wherein the drying assembly includes infra red lamps above the webbings and infra red lamps beneath the webbings for drying the pigment and paint base onto the webbings prior to being received on the take up roll.

7. The system as set forth in claim 6 wherein the drying assembly also includes a V-shaped bend with a rubber surface on

the side of the outlet slot proximate the take up roll and a V-shaped point on the side of the outlet slot remote from the take up roll, the V-shaped bend and the V-shaped point constituting a squeegee to remove excess liquid from the webbings prior to movement of the webbings between the lamps.

8. A method of mixing and applying a coating of liquid to a base comprising, the steps of:

providing a container with a quantity of coating liquid including a luminescent pigment and a paint base;

providing an impeller in proximity to the bottom of the container to keep the pigment in suspension in the paint base, the container also having a linear inlet slot and a linear outlet slot;

feeding a base material from a supply roll to a take up roll and across a plurality of idler rolls to move the base material from the supply roll, across the take up rolls and through the container and liquid therein and to the take up roll; and

drying the base material at a location between the outlet slot and the take up roll.

9. The method as set forth in claim 8 wherein the base material is a plurality of straps of nylon webbing.

10. The method as set forth in claim 8 wherein the liquid includes two components in the ratio of one kilogram of a luminescent pigment to one U.S. gallon of a paint base.

11. A material for use in applying a coating of liquid to a base such as a nylon webbing, the liquid including two components in the ratio of about one kilogram of a luminescent pigment to one U.S. gallon of a paint base.